ABSTRACT

The invention provides hollow nanoparticles of a protein with the ability to recognize specific cells such as the hepatocytes and to form particles (for example, hepatitis B virus surface-antigen protein), wherein the protein has a cysteine residue substituted to a different amino acid. The hollow nanoparticles have a stable particle structure and can be used to efficiently transfer substances to specific target cells or tissues. The invention also provides a drug using the hollow nanoparticles.